

ABSTRACT OF THE DISCLOSURE

The present disclosure relates to detection of light (or radiation) at different wavelengths. A voltage-tunable multi-color infrared (IR) detector element receives incident radiation through a substantially-transparent substrate. Side surfaces of the voltage-tunable multi-color IR detector element reflect the incident radiation, thereby redirecting the radiation. The reflected radiation is directed through a voltage-tunable multi-color infrared (IR) detector. Energy proportional to different ranges of wavelengths is detected by supplying different bias voltages across the voltage-tunable multi-color IR detector element.